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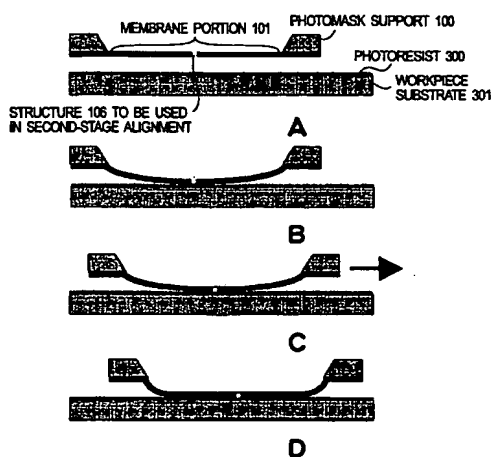
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(54) Title: METHOD OF DETECTING RELATIVE POSITION OF EXPOSURE MASK AND OBJECT TO BE EXPOSED, ALIGNMENT METHOD, AND EXPOSURE METHOD USING THE SAME



(57) Abstract: An alignment method for an exposure mask and an object to be exposed, wherein exposure is carried out while the exposure mask having a light blocking film formed at a membrane portion thereof is closely contacted to the object to be exposed and light from a light source is projected to the object to be exposed, through the exposure mask, and wherein alignment of the exposure mask and the object to be exposed is carried out prior to the exposure, the method comprising the steps of preparing an exposure mask having a light blocking film provided on a base material constituting the membrane portion and having a structure for performing position detection, flexing the membrane portion and detecting, by use of the structure, a relative position of the exposure mask and the object to be exposed, in a state in which the exposure mask is contacted to the object to be exposed, and aligning the exposure mask and the object to be exposed, with each other, on the basis of a result of the position detection.

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**A. CLASSIFICATION OF SUBJECT MATTER**

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According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G03F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, INSPEC

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 171 730 B1 (KURODA RYO ET AL) 9 January 2001 (2001-01-09) cited in the application column 3, lines 58-67 column 9, lines 1-27	6,8
Y		1-5,7,8
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☒ Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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